
Los Alamos National Laboratory

Develops

“Quick to WIPP”

Strategy

Waste Management Symposium, WM’03

Robert Jones

Los Alamos National Laboratory



Quick to WIPP

Acknowledge and thank co-authors:

**Los Alamos National Laboratory
Garry Allen, Beverly Martin, Stan Kosiewicz**

**Department of Energy
James Nunz, James Orban**

**Westinghouse TRU Solutions, LLC
Jennifer Biedscheid, Todd Sellmer, Joe Willis**

**Shaw Environmental & Infrastructure, Inc.
Sinisa Djordjevic, Kevin Liekhus**

Quick to WIPP

Introduction

9,100 m³ transuranic waste stored

- **more than half above ground**
- **55-gallon drums**
- **fabric covered domes**



IM-4: di02-0953-015

Quick to WIPP

Two major events

- May 2000 Cerro Grande forest fire
- September 11, 2001 terrorist attack



Quick to WIPP

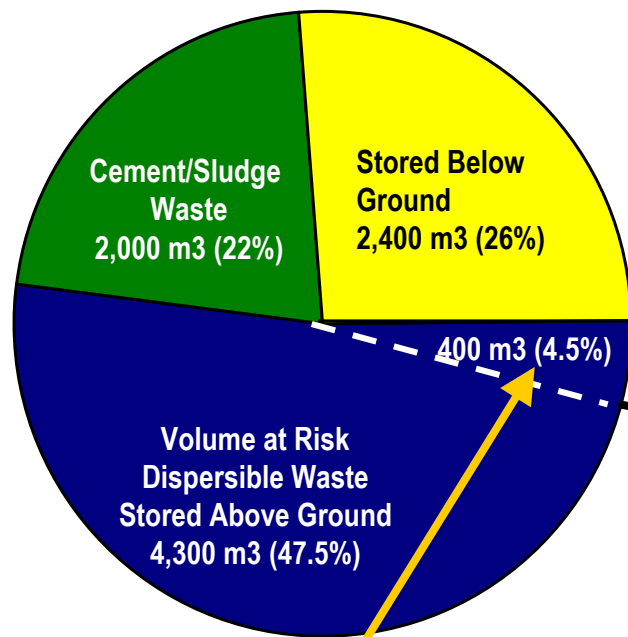
Goal

- Move from managing risk
- To eliminating or significantly reducing



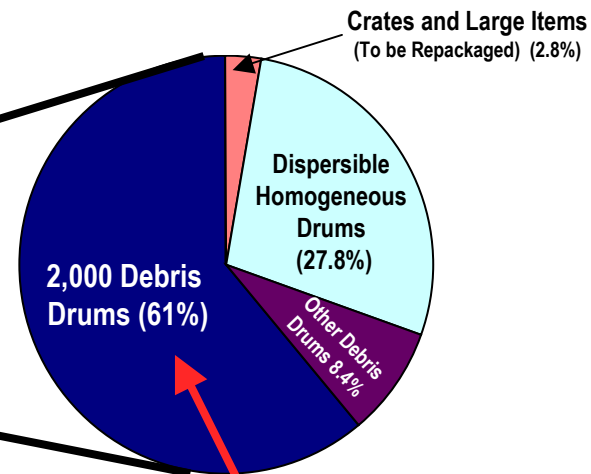
Quick to WIPP

Waste Volume At LANL TA-54 (9,100 m³)



4.5 % of Inventory

Activity Related to Volume at Risk



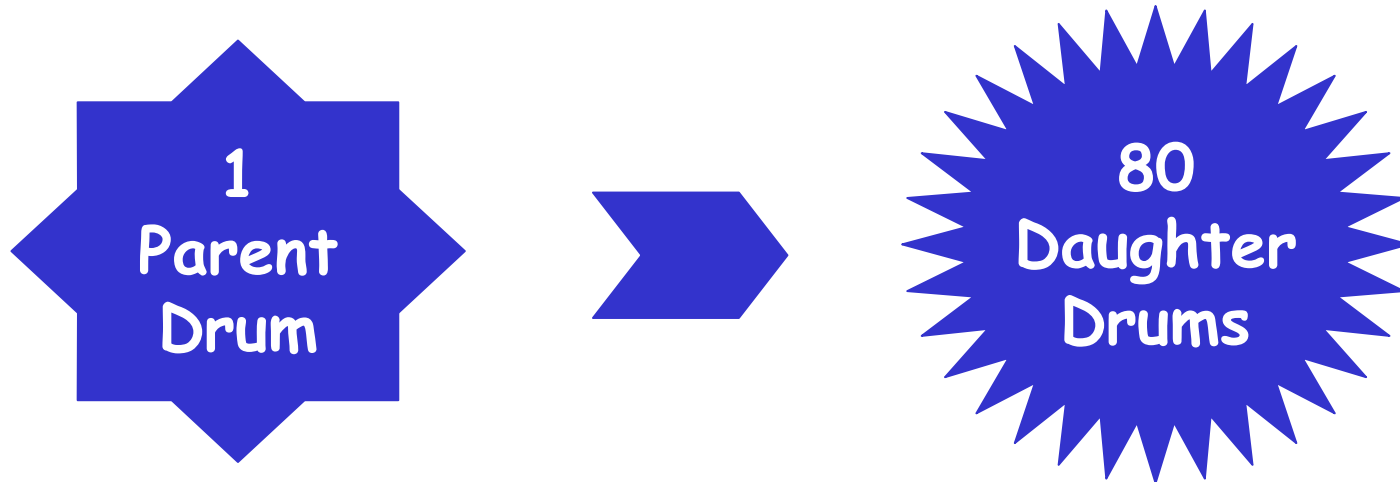
61% of Risk

Translates to

Waste

High wattage

H₂ concentration < 5%



Question

- **Over come repackaging barrier**
- **Meet all regulatory requirements**

Study

- **DOE commissioned feasibility study**
- **3 scenarios**

Quick to WIPP



Solution

- Load the ICV
- Apply a vacuum
- Backfill with nitrogen
- Limit time in ICV to 5 days



Implementation

- **Feasibility study complete February 02**
- **NRC briefing February 02**
- **Revision 19a to TRAMPAC submitted March 02**
- **Demonstration test June - September 02**
- **Stakeholder briefings Summer 02**
- **NRC approved Revision 19a July 02**
- **First Quick to WIPP drums shipped December 02**

Quick to WIPP

Benefits

- Shipments to WIPP reduced from 739 to 55
- Costs and risks of repackaging reduced two-thirds

